

AN 111:63755 CA
 TI Cationic and amphoteric polymers with conditioning effect for ***hair***
 preparations
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 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
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1, 2, 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01092211	A2	19890411	JP 1987-250360	19871003
	JP 06051617	B4	19940706		

PRAI JP 1987-250360 / 19871003

AB Cationic and amphoteric polymers having quaternized structure repeating units $\text{CH}_2\text{CR}_1(\text{COA}_1\text{R}_2\text{N}^+ + \text{R}_3\text{Me}_2\text{X}^-)$ [R₁ = H, Me; R₂ = C₁₋₄ alkylene; R₃ = C₁₋₄ alkyl, CH₂Ph, CH₂CH₂OH, glycidyl, CH₂CH(OH)Me, CH₂CH(OH)(OCH₂CH₂)_nOH; A₁ = O, NH; X = Br, Cl, I, MeSO₄, EtSO₄; n = 1-9] 5-60, amphoteric structure repeating units $\text{CH}_2\text{CR}_4(\text{COA}_2\text{R}_5\text{N}^+ + \text{R}_6\text{Me}_2\text{CO}_2^-)$ (R₄ = H, Me; R₅, R₆ = C₁₋₄ alkylene; A₂ = O, NH) 95-40, and other structure repeating units 0-50 mol%, have good conditioning effect and are useful for ***hair***
 preps. The polymers are compatible with anionic compds., do not build up on ***hair***, reduce electrostatic charge, and facilitate combing and styling. A shampoo contained 30% aq. cocoamidopropyl betaine soln. 10, 27% aq. poly(oxyethylene) lauryl ether sulfate triethanolamine salt soln. 10, cationic and amphoteric polymer [av. mol. wt. 120,000, prep'd. from (dimethylamino)propyl methacrylate 1.0, EtBr 0.05, and C₁CH₂CO₂K 0.95 mol] 1, and H₂O to 100 parts by wt.

IC ICM C08F220-34
 ICS A61K007-06; A61K007-075; C08F220-34; C08F220-36

ICI C08F220-34, C08F220-36; C08F220-36, C08F220-34

CC 62-3 (Essential Oils and Cosmetics)

ST ***cationic*** ***amphoteric*** ***polymer*** ***hair***
 prep'd. conditioner

IT Shampoos
 (cationic and amphoteric polymers in, with good conditioning effect)

IT ***Hair*** preparations
 (conditioners, cationic and amphoteric polymers in)

IT 74-96-4D, Ethyl bromide, reaction products with dimethylamino-contg. methacrylic polymers and monochloroacetic acid salts 540-51-2D, Ethylene bromohydrin, reaction products with dimethylamino-contg. methacrylic polymers and monochloroacetic acid salts 540-54-5D, Propyl chloride, reaction products with dimethylamino-contg. methacrylic polymers and monochloroacetic acid salts 7748-25-6D, Potassium monochloroacetate, reaction products with quaternized amino-contg. methacrylic polymers 24145-67-3D, reaction products with quaternized amino-contg. methacrylic polymers 26658-83-3D, Butyl methacrylate-(dimethylamino)ethyl methacrylate copolymer, reaction product with alkyl halides and monochloroacetic acid salts 29531-62-2D, reaction product with alkyl halides and monochloroacetic acid salts 53466-45-8D, reaction product with alkyl halides and monochloroacetic acid salts 121859-51-6D,

reaction product with alkyl halides and monochloroacetic acid salts

RL: BIOL (Biological study)

(***hair*** prepns. contg., with good conditioning effects)